

**Reprinted Remarks section from March 12, 2004 response.**

**Section 112 Claim Rejections**

In Paragraph 2 of the Office Action the Examiner rejected originally filed claims 84-89 and 99-102 as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The last clause of claim 84 refers to the metathesis material which undergoes a metathesis reaction and forms said adhesive that bonds the two substrates. The amendment clarifies what the adhesive is.

Figure 1 illustrates contacting of the substrates, one with catalyst applied, and one with metathesis material, which on joining creates an adhesive interlayer between the first and second substrates.

The amendment to claim 84 clarifies the timing of applying catalyst prior to application of metathesizable material. The specification on page 21, line 1-7 teaches that the dry catalyst-coated surface should retain its activity for at least five minutes, preferably at least 24 hours, more preferably for at least 1 month, and most preferably for at least 6 months. This stability contributes to manufacturing flexibility by providing a relatively long time period during which the metathesizable material may be contacted with the catalyzed surface prior to bonding.

Claim 85 as amended moots the rejection applied in paragraph 3 under 35 USC 112. The specification provides support noted above for claim 84 for application prior to bonding. The bonding occurs as the polymerization takes place after joining the two substrates. Bonding results from polymerization.

Claim 99 was supported by the support noted for claim 84 as the catalyst is applied prior to application of the metathesizable material construing claim 99 in a manner that would view the application in preselected areas as encompassing the entire area is unreasonable in light of the clear distinction made in the specification that this is not the case. Page 20, line 22-24 clearly distinguishes the former from the latter. "The catalyst can be applied to achieve continuous surface coverage or coverage only in predetermined selected areas by any conventional coating/printing means such as spraying, dipping, brushing, wiping, roll-coating or the like. " (emphasis added).

### **Section 102(b) Rejections**

In paragraph 5 of the Office Action the Examiner rejected originally filed claims 84, 85, 87-89 and 99-102 under 35 U.S.C. 102(b) as being anticipated by or, in the alternative under 35 U.S.C. 103(a) as obvious over Suzuki et al (US 5,317,785). This rejection under 102(b) is overcome in view of the amendments to claim 84. Suzuki does not disclose a bonded article comprising two substrates and an adhesive between them. Picking apart only a portion of a reference, ignoring other parts, and not reading the reference as a whole is improper.

The instant article differs in the location of catalyst. In contrast to a RIM bulk molding where catalyst is dispersed within the bulk liquid monomer, the instant article contains catalyst attached to one substrate, and the polymerizations sites emanate from these sites. The claimed invention is a materially different article that is impossible to make from the Suzuki et al

disclosure.

The Office has ignored the simple fact that Suzuki is a molded composite where one substrate is inserted into a mold and a catalyst-monomer mixture is pumped into the mold and polymerized. According to the Office it is the examiner's position that in the article Suzuki et al., it is the

metathesis polymer layer that can be said to be an adhesive as it is bonding the adjacent surface "layers" in the final composite laminate. There are not layers, just one layer which becomes a substrate. The instant article is a joining of two material substrates with an adhesive polymerizes between them, not by a bulk polymerization of monomer-catalyst mixture, but a contact metathesis reaction under normal ambient conditions.

### **Section 103(a) Claim Rejections**

In Paragraph 6 of the Office Action the Examiner rejected originally filed claims 84-89 and 99-102 under 35 U.S.C. §103(a) as being unpatentable over the admitted state of the prior art taken with Muehlbach et al. (US 5,973,085), Ofsted (US 3,935,179) and Suzuki et al. (US 5,137,785), and optionally further in view of Lesser (US 2,978,354).

Muehlbach is cumulative to Suzuki for teaching ROMP catalysts, but the disclosure is dedicated to teaching compounds containing 2 strained rings. (Col. 2, line 13-15.) Columns 2-18 are devoted entirely to these 2-ring compounds. The remaining disclosure – columns 19 – 42+ relate to the myriad ROMP catalysts. Muelbach is directed to coatings. There is no disclosure of bonded articles of 2 substrates. General suppositions concerning what is taught by Muelbach and

Ofstead are nonenabling to result in the claimed articles. Both references do not teach adhesives, but coatings. Both references do not teach contact metathesis polymerization.

Ofstead teaches coatings using catalysts that are not air stable. It is a physical impossibility to use the catalysts of Ofstead to form the articles instantly claimed. Ofstead predated the invention of air stable catalysts by more than 10 years. The Ofstead methods are none other than bulk or solution polymerizations. See Col. 4, line 60+, and Col. 5, line 13. It is a batch or continuous reactor process.

The materials of construction are admittedly old. There is no revelation that these materials are not known. Applicants' specification teaches every one of the materials used in the invention is previously known. Because the elements of the claimed invention are not all found in the prior art, and missing is a second substrate bonded to a first substrate by way of contact metathesis polymerization, the prior art is deficient, and non-enabling in its teachings, and can not be applied without synthesizing elements which simply are missing, using Applicants' disclosure as a guide, in other words, engaging in improper forms of hindsight reconstruction.

In Paragraph 7 of the Office Action the Examiner rejected originally filed claims 84, 85, 87-89, and 99-102 under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. (US 5,317,785) as applied above, and further in view of Lesser (US 2,978,354) as applied in the office action dated October 4, 2002. Suzuki is directed to making composites in a RIM mold by insertion of a single substrate. The Lesser disclosure is directed unrelated chemistry. Lesser is directed to addition cured coatings, and predated the invention of air-stable metathesis catalysts by 20 years. *Prima facie* unpatentability has not been shown because none of the prior art references (Suzuki alone) or in combination teach or

suggest every element of the claim. The elements of a single substrate, coated by a metathesis coating in the prior art, do not show a similar arrangement of the elements of two substrates, and a polymerizate in the same manner as the instant claims

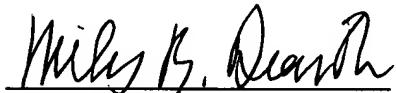
The rejections under 35 USC 102(b) and 103 (a) fail for the reasons detailed above. Reconsideration and removal therefore is respectfully requested.

**Miscellaneous**

Examiner is authorized to charge deposit account 12-2143 the amount required for the appropriate extension of time for filing a response to the Office Action. This authorization is repeated in the transmittal letter.

In light of the amendment and Remarks herein, Applicant pray for allowance of the claims as amended as they are believed to be in condition for allowance.

Respectfully submitted,



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Miles B. Dearth  
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July 1, 2004  
Date